

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **56020315 A**(43) Date of publication of application: **25.02.81**

(51) Int. Cl.

H03F 3/45(21) Application number: **54095830**(71) Applicant: **NIPPON GAKKI SEIZO KK**(22) Date of filing: **27.07.79**(72) Inventor: **IWAMATSU MASAYUKI**(54) **LOW-FREQUENCY AMPLIFYING CIRCUIT**

COPYRIGHT: (C)1981,JPO&Japio

(57) Abstract:

PURPOSE: To make it possible to extract output electric current up to an extremely large value determined by an electric power voltage by changing the operation mode of a low-frequency amplifying circuit, used at the initial stage of an audio signal amplifying circuit, in accordance with the magnitude of an input signal.

CONSTITUTION: When no signal arrives, voltage EL across resistance 25 is $I_1 \times R_L$ (straight line X). In case that input signal voltage V_{in} less than $I_1 \times R_E$ is applied to input terminal 11b, output current amplitude is less than electric current I_1 , providing operation of class A as shown by curve Y. As voltage V_{in} is further increased, B-class operation shown by curve Z is performed. Namely, the operation mode can be carried on as it is from the A-class operation to the B-class operation. Consequently, the circuit can extract the output electric current up to an extremely large value determined by an electric power voltage without reference to constant current sources 23 and 26.

